

Hyundai America Technical Center, Inc. 6800 Geddes Rd - Superior Township, MI - 48198 Phone: (734)337-9499 FAX: (734)337-3168

March 28, 2014

National Freedom of Information Officer United States Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. (2822T) Washington, D.C. 20460

Dear Sir or Madam:

Pursuant to the Freedom of Information Act ("FOIA"), 5 U.S.C. § 552 and the implementing regulations codified in Part 2 of Title 40 of the Code of Federal Regulations, on behalf of Hyundai-Kia America Technical Center, I respectfully request that the U.S. Environmental Protection Agency ("EPA" or "the Agency") provide public access to the records described below in the time prescribed by 5 U.S.C § 552(a)(6)(A).

- All records that contain, describe or refer to road load or road force coastdown measurements
 or tests of Hyundai or Kia vehicles, conducted by EPA or by EPA's contractors on or after
 January 1, 2006, and all records that contain, describe or refer to vehicle procurement and
 selection activities, vehicle maintenance and preparation or preconditioning activities, or test
 procedures or post-test audits or data review occurring or used in such measurements or
 tests.
- 2. All records that contain, describe or refer to fuel economy tests or greenhouse gas ("GHG") emissions tests of Hyundai or Kia in-use vehicles, conducted by EPA or by EPA's contractors on or after January 1, 2006, and all records that contain, describe or refer to vehicle procurement and vehicle selection activities, vehicle maintenance and preparation or preconditioning activities, or test procedures or post-test audits or data review occurring or used in such measurements or tests.
- 3. All records that contain, describe or refer to road load or road force coastdown measurements or tests of light-duty vehicles or light-duty trucks not manufactured by Hyundai or Kia, conducted by EPA or by EPA's contractors on or after January 1, 2006, and all records that contain, describe or refer to vehicle procurement and selection activities, vehicle maintenance and preparation or preconditioning activities, or test procedures or post-test audits or data review occurring or used in such measurements or tests.
- 4. All records that contain, describe or refer to road load or road force coastdown measurements or tests of Hyundai or Kia vehicles, conducted by persons other than Hyundai, Kia, EPA or EPA's contractors on or after January 1, 2006, and all records that contain, describe or refer to vehicle procurement and selection activities, vehicle maintenance and preparation or preconditioning activities, or test procedures or post-test audits or data review occurring or used in such measurements or tests.
- 5. Except to the extent requested above, all records that contain, describe or refer to road load or road force coastdown measurements or tests of in-use light-duty vehicles or light-duty trucks conducted by EPA or EPA's contractors at any time in connection with the "EPA roadload confirmatory program" to which EPA's January 7, 2002 Draft Road Force Confirmation/Evaluation Procedure (hereinafter "EPA 2002 Procedure Document").

- 6. Except to the extent requested above, all records that contain, describe or refer to any plan "to evaluate audit data for a systematic production fleet bias" to which the EPA 2002 Procedure Document refers, or to any such evaluation of such audit data or a similar evaluation.
- 7. Except to the extent containing confidential business information belonging to a manufacturer, all records that contain, describe or refer to evaluations or investigations of fuel economy or greenhouse gas emissions testing or reports concerning such testing of any light-duty vehicles or light-duty trucks, or compliance by a manufacturer with the Agency's motor vehicle GHG emissions standards or test procedures (including but not limited to EPA's regulations published in part 600 of title 40 of the Code of Federal Regulations). This request includes but is not limited to any such testing or reports on which the Director, Office of Transportation and Air Quality relied in his September 2013 interview as reported the October 2013 edition 3, of Automotive News found http://www.autonews.com/article/20131003/OEM11/131009934/epa-to-go-public-withresults-of-vehicle-mpg-audits#axzz2gh5ocOPh.
- 8. Except to the extent requested in the prior paragraph or containing confidential business information belonging to Ford Motor Company, all records that contain, describe or refer to decisions to open, close or consider evaluations or investigations of the accuracy or completeness of claims or reports made by Ford Motor Company concerning the fuel economy or greenhouse gas emissions emissions performance of new motor vehicles produced or sold by Ford Motor Company.
- 9. Except to the extent requested in prior paragraphs or containing confidential business information or information exempt from mandatory release under 5 U.S.C. § 552(b)(5), all records that contain, describe or refer to any enforcement action taken in response to, or remedy requested by EPA to address, an actual or potential violation or nonconformity by any manufacturer of the Agency's motor vehicle GHG regulations, the requirements of part 600 of title 40 of the Code of Federal Regulations, or 40 C.F.R. § 86.129-00.
- 10. All records that contain, describe or refer to interpretations by EPA, including but not limited to the Office of Transportation and Air Quality or its staff, of the term "representative" as it is used in 40 C.F.R § 86.129-00, "good engineering judgment" as the term is used in 40 C.F.R. § 86.1851-01, "systematic production fleet bias" as the term is used on page 4 of the EPA 2002 Procedure Document, or "equivalent results" as the term is used in EPA's December 21, 1998 Single Roll Dynamometer Adjustment and Road Force Determination document (copy attached), that were made available to the public.
- 11. Except to the extent requested in the prior request or exempt from mandatory release under 5 U.S.C. § 552(b)(5), all other records that contain, describe or refer to interpretations by EPA or by EPA staff of the term "representative" as it is used in 40 C.F.R. § 86.129-00, "good engineering judgment" as the term is used in 40 C.F.R. § 86.1851-01, "systematic production fleet bias" as the term is used on page 4 of the EPA 2002 Procedure Document, or "equivalent results" as the term is used in EPA's December 21, 1998 Single Roll Dynamometer Adjustment and Road Force Determination document.
- 12. All records that contain, describe or refer to any evaluation by EPA or EPA's contractor of the impact of any of the following on road load or road force coastdown measurements or test results:
 - a. Track surface, including track surface smoothness;
 - b. Ambient meteorological conditions or test track temperature during testing.

- c. Tire or vehicle break-in and warm-up procedures or practices, or the condition of tires or vehicles used in road load or road force coastdown measurements or testing;
- d. Application of brakes during or between such measurements or testing; or
- e. Any "[i]nherent test and vehicle variation" as the terms are used in the EPA 2002 Procedure Document.
- 13. Each and every current delegation concerning the responsibility/authority related to administration of the Clean Air Act programs found at 40 C.F.R. Part 86, Subpart S ("General Compliance Provisions for Control of Air Pollution From New and In-Use Light Duty Vehicles, Light-Duty trucks, and Complete Otto-Cycle Heavy-Duty Vehicles")."

As used in each of these requests, the term "record" has the same meaning as in 5 U.S.C. § 552(f)(2). As used in the first, second, third and fourth numbered requests above, "vehicle procurement and selection activities, vehicle maintenance and preparation or preconditioning activities, or test procedures or post-test audits or data review occurring or used in such measurements or tests" include the following:

- All records that contain, describe or refer to vehicle preparation or preconditioning procedures or to test or measurement procedures used in such testing or measurements:
- 2. All records that contain, describe or refer to equipment used in such coastdown measurements or testing of Hyundai or Kia vehicles;
- 3. All records that contain, describe or refer to meteorological observations taken during such coastdown measurements or testing of Hyundai or Kia vehicles;
- 4. All records that identify, by Vehicle Identification Number or another means, the Hyundai or Kia vehicles used in such coastdown measurements or testing:
- All records that identify, by Vehicle Identification Number or another means, any Hyundai or Kia vehicle considered for use in such coastdown measurements or testing but not used in such coastdown measurements or testing;
- All records that contain, describe or refer to decisions whether or not to conduct testing or measurements on a specific vehicle considered for testing or measurement; or
- 7. All records that contain, describe or refer to data validation, audits, or quality-control review of any such coastdown measurements or testing. Such records include but are not limited to determinations whether such coastdown measurements or testing complied with regulations, guidance, protocols, practices or procedures, or deviations or noncompliance with such regulations, guidance, protocols, practices or procedures.

The foregoing records are urgently needed in order to determine how to comply with the Agency's emissions regulations and test procedures, and to respond to allegations that Hyundai and Kia have not complied with those regulations and test procedures. Hyundai-Kia America Technical Center wishes to minimize any burden associated with EPA's compliance with its requests, in order to conserve EPA's resources and to expedite public access to the requested records. To that end, I would be glad to meet or confer with EPA staff to determine whether Hyundai-Kia America Technical Center should modify any portion of this request. In addition, if any portion of this request for records is deemed to be insufficient to allow EPA to identify and locate the requested records, please contact me by telephone as soon as possible at 734-337-2298.

Pursuant to 40 C.F.R. § 2.112(a), within 10 working days of your receipt of this request, please send me your written determination stating which of the requested records will or will not be released and, for the latter, the reason(s) for each denial of a request. If, pursuant to 40 C.F.R. § 2.112(e), your office receives notification that an EPA office taking action on this request has extended the basic 10 working-day period for an additional period not to exceed 10 additional working days, please notify me by telephone as soon as possible of such an extension.

Please be advised that, in accordance with 40 C.F.R. § 2.120(a), Hyundai-Kia America Technical Center will pay the charges for searching for and reproducing the requested records. Hyundai-Kia America Technical Center prefers to make such payment upon the presentation of EPA's invoice for such charges concurrent with the EPA's release of copies of the requested records. However, Hyundai-Kia America Technical Center is prepared to comply with any other reasonable payment arrangements which EPA deems appropriate, including advance payment as provided in 40 C.F.R. § 2.120(c). Please contact me as soon as possible by telephone to make any necessary arrangements.

Sincerely,

Mark S. Torigian

General Counsel

cc: Mr. Byron Bunker

Mr. Phillip Brooks

Mr. John Hannon

Dear Manufacturer:

Subject: Single Roll Dynamometer Adjustment and Road Force Determination.

This letter sets forth procedures for determining vehicle road force and simulating it on a single roll dynamometer. The goal of of this process is to have dynamometer operation match road operation as closely as possible. Alternative methods that accomplish this goal are acceptable.

<u>Populations</u>. The manufacturer's product line is divided into populations having similar road force characteristics. Factors that affect road force (e.g. body style, weight, tire type, transmission configuration, aerodynamic options, etc.) shall be considered. A manufacturer may include vehicles with lower road force in a given population, such vehicles shall not be considered when selecting a representative vehicle.

Representative Vehicle. Manufacturers shall select a vehicle for coastdown testing from within the population that satisfactorily represents each vehicle design within the population. It is the expectation that if any production vehicle is tested within the population, the road force would be similar to that reported for the representative vehicle.

Manufacturers have the responsibility to update their application to reflect actual production. This may be especially important when the "representative" vehicle is a prototype.

Road Force. Road force, as a function of speed, shall be determined for the representative vehicle. EPA will use the SAE J2263 procedure for confirmatory coastdown testing, manufacturers may use any procedure or method that yields equivalent results. For example, tire dynamometer or wind tunnel data may be used to adjust test results from one population to stand for another. Also, results from multiple vehicles can be mathematically combined to yield a more representative average.

Dynamometer Adjustment. Prior to emission or fuel economy testing, the manufacturer shall evaluate each test vehicle on the single roll dynamometer to determine the proper dynamometer adjustments to simulate road force. These adjustments can be used for subsequent testing for that test vehicle and population. (Specific dynamometer adjustments must be established for each vehicle population represented by a given test vehicle.) For confirmatory testing at EPA, the Agency may choose to conduct its own evaluation of the actual test vehicle on its dynamometer to

determine the proper dynamometer adjustments (i.e., the "A, B and C" coefficients) or may choose to accept the manufacturer's determined values.

Quick Checks. After completing the highway fuel economy test, the manufacturer shall verify that the vehicle-dynamometer combination reproduced the required road force (allowing normal vehicle and test variability.) The Agency may perform the SAE J2264 full speed range coastdown or a single speed evaluation (e.g., 55 to 45 mph quick check) after completion of the test sequence. Manufacturers may use any procedure that yields equivalent results.

Tolerances. EPA is not establishing any performance tolerances at this time. It is expected that manufacturer road force submissions will represent their populations, confirmatory testing on production vehicles should not indicate any overall bias. Also, EPA believes that the dynamometer "quick check" tolerance (formerly employed on twin roll dynamometer tests) is no longer appropriate. The single roll dynamometer should be much more accurate and repeatable, thus eliminating one source of error. Also, since each test vehicle will receive is own dynamometer adjustment (rather than generic settings), vehicle to vehicle offsets will not occur. Although the dynamometer tolerance in SAE J2264 appears to be appropriate for most vehicles, EPA is not adopting it at this time. If necessary, this topic may be considered again in the future after additional experience with the single roll dynamometer and procedures. Manufacturer input will be solicited at that time.

If you have any questions, please contact Mr. Eldert Bontekoe of my staff at (734) 214-4442.

Sincerely,

Jane Armstrong, Director Vehicle Programs and Compliance Division Office of Mobile Sources